An Invisible Pandemic: The Impact of COVID-19 on the Mental Health of Healthcare Workers

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Abstract

The novel coronavirus 19 was first recorded in Wuhan China, and spread rapidly through the world. Soon, citizens throughout the United States had to learn how to adapt to a new way of living, and many healthcare workers felt the impact of the pandemic more severely, facing even more extreme stressors than the general public. Because of this, healthcare workers had an increased likelihood to experience greater levels of anxiety, depression, PTSD, suicidal ideation, moral injury, and/or other negative mental health effects. Through various programs that promote healthy coping mechanisms, develop resiliency factors, and improve overall mental and physical health, some hospitals have seen improvement in the impact of COVID-19 on their workers. The hope of this review of literature is to encourage the implementation of these actions at various hospitals to address the invisible pandemic of mental illness that these workers now face.

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Introduction

Healthcare workers, physicians, and nurses are essential providers of care. They make life and death decisions on a daily basis, which creates "normal" job stress and anxiety. Enter an additional stressor, the novel coronavirus-19 (COVID-19) pandemic. An additional strain is now being placed on an already taxed healthcare environment. How do we treat this illness? Do we have the supplies and resources to care for the thousands of patients coming to our hospitals? These factors are impacting the individuals who are employed in healthcare careers. They are at an increased risk of stress, burnout, and suicide compared to members of the general public (Chirico et al, 2020). Healthcare is an ever changing, evolving field, and because of this healthcare workers face challenges never encountered before, almost every day. Facing these challenges with little to no guidance on proper safety procedures only adds to the mounting potential negative mental health effects that healthcare workers may experience while facing new diseases and rising hospitalization rates. Physicians and nurses are considered a high-risk group for suicide with male physicians having a 40% higher risk and female physicians having a 130% higher risk of suicide than the general population (Young et al, 2021). When faced with these additional challenges in their field, epidemics and global pandemics, healthcare workers struggle even more to maintain their mental health and limit their stress, burnout, and other negative sequelae.

The COVID-19 was first recorded in Wuhan China, and spread rapidly through the world. When the number of cases reached epidemic proportions, the WHO declared COVID-19 a pandemic. As countries closed their borders and limited travel, the world saw just how easily this new virus was able to spread. The first case, patient zero, in the United States was recorded in Seattle, Washington**.** Unfortunately, due to a flaw in the tracing process, one individual who

had been in close contact with patient zero was not found in time to implement quarantine procedures. This individual continued to spread the virus within the United States (U.S.). It spread rapidly across the country. Soon, citizens throughout the United States had to learn how to adapt to a new way of living. This included no longer having face to face events, not being able to be close to family members, not traveling, and learning how to operate their daily lives in a remote fashion.

Healthcare workers felt the impact of the pandemic more severely, facing even more extreme stressors than the general public. Many of them were separated from their families for extended periods of time to protect their families from contracting the virus, and reducing this social contact effectively put them at an even higher risk for suicide (Devitt, 2020). The workers were exposed frequently to COVID-19 without proper personal protective equipment (PPE), and witnessed patients dying daily due to a lack of medical resources available for their care at their hospitals. Because of this, healthcare workers had an increased likelihood to experience greater levels of anxiety, depression, post traumatic stress disorder (PTSD), suicidal ideation, moral injury, and/or other negative mental health effects.

Thus the global COVID-19 pandemic has had a major impact on the mental health of healthcare workers. There are factors that have been shown to help alleviate and prevent negative mental health outcomes in workers during the pandemic. These include having a strong support system, having access to proper protective equipment and education on how to use the equipment, as well as preexisting coping mechanisms. Conversely, there are also factors that have been shown to worsen negative mental health effects experienced by healthcare workers during the pandemic including working longer hours without enough time recover afterwards, facing unsafe patient ratios, and lacking the ability to protect themselves from infection.

Through various programs that promote healthy coping mechanisms, develop resiliency factors, and improve overall mental and physical health, some hospitals have seen improvement in the impact of COVID-19 on their workers. The hope of this research is to encourage the implementation of these actions at various hospitals to promote mental health for workers and provide adequate support for those who care for so many others. It is important to note, though, that with this deterioration of mental health we are now at risk of experiencing another widespread pandemic of potential mental disorders following this disease outbreak (Giorgi et al, 2020).

Moral Injury

Moral injury can cause an individual to question themselves because of the inability to perform their duties to the highest standards in a way that does not violate their ethics or morals. The psychological distress following an individual's actions or inability to take action in a manner that violates their ethical or moral code can eventually lead to moral injury (Chiric et al, 2020). Interestingly, the severity of moral injury reported among healthcare workers on the frontlines of the COVID-19 pandemic paralleled the scores of members of the military who had been exposed to 7-month war zone deployments with a particular correlation in the reporting of betrayals by others (Hines et al, 2020). It seems significant, then, that the distress healthcare workers now face draws parallels to the long known distress associated with military service. The aid for these military individuals is still lacking.

Surprisingly, moral distress surveys conducted over the past decade showed that levels have been consistently moderately high, even during times without the added stressors of pandemics and epidemics (Hines et al, 2021). This lends to the understanding that healthcare

worker mental illness and moral distress have long been at elevated levels without effective interventions being put into place to prevent the development of long term moral injury.

During the COVID-19 pandemic, healthcare workers have been forced repeatedly to make decisions about who receives lifesaving treatment and who doesn't due to a shortage of equipment and staff (Roycroft et al, 2020). They are now being forced to face unprecedented amounts of death without proper palliative care or the high quality interventions they would've been able to supply in times prior to the pandemic (Chirico et al, 2020). This increase in demand for high quality care coupled with a lack of resources and increased incidence of poor outcomes and death puts workers at an increased risk for experiencing moral injury as they perform their jobs. Because of this, we are now seeing an increase in moral injury with other negative mental impacts in healthcare workers.

Early detection of moral injury is key in the prevention of long term effects because interventions can then be implemented in a timely manner to get healthcare workers the help needed before the damage reaches a crisis level (Hines et al, 2021). One preventative strategy for moral injury among healthcare workers was having the responsibility for the decisions of who receives lifesaving care and who does not, become a shared responsibility among multiple individuals and then allowing time for decompression following high intensity situations (Roycroft et al, 2020). Sharing the weight of these moral responsibilities could potentially help reduce the distress seen among healthcare workers (HCWs) forced to make these difficult decisions. It is suggested that primary and secondary prevention programs be implemented to help promote the resiliency of those working in healthcare and prevent longer-term consequences of moral injury. Moreover, these programs could also aid workers in managing their own

symptoms thus equipping them to better handle the significant amounts of stress they encounter on a daily basis (Hines et al, 2021).

Moral Injury and its Impact on Safety, Mental Health, and Quality of Care

Just as healthcare workers have an ethical duty to those they care for, hospitals and administrators have an ethical duty to balance the required care the employees must provide with maintenance of their own personal well-being. It is vital to realize that this includes protection not only from physical illness via strategies like PPE but also protection against moral injury and psychological distress (Hines et al, 2021). Burn-out is increasingly being seen as a contributor to negative impacts on job performance, quality of patient care, and job satisfaction for healthcare workers (Hines et al, 2021). It can be defined as emotional exhaustion, depersonalization, and reduced professional efficacy (Young et al, 2021). It stands to reason, then, that healthcare workers who are experiencing burn-out when being sent out into the field to practice are not as safe or effective in their profession as their peers who are not experiencing burn-out. In fact, the World Health Organization (WHO) has recognized that the distress caused in the situations that healthcare workers are facing is an important factor that ultimately impacts the safety of the patients to whom they are providing care (Hines et al, 2021).

Hospitals need to implement a structured response for psychological crises to serve the needs of their employees in the long term, not just during times of pandemics or epidemics, but during “normal” operations as well. Furthermore, hospitals should implement crisis planning for events like the COVID-19 pandemic, similar to the disaster plans they have created to prepare for potential disaster situations that address the potential psychological interventions required to ensure the safety and well-being of their workforce. Creating this plan ahead of time with

actionable steps and processes for intervention will help to reduce the time it takes to supply potentially lifesaving interventions to members of the healthcare community (Dean et al, 2020).

Healthcare Worker Suicide Following Moral Injury and Mental Health Impacts

The predominance of work-related issues for those in healthcare compared with other groups is a unique feature of suicide within this population (Moutier et al, 2021). Even before data regarding healthcare worker suicide during the COVID-19 pandemic was released, evidence showed higher rates of suicide in nurses than in age-matched individuals of the same gender in the general population. Burnout, depression, and suicide are considered unspoken occupational hazards associated with becoming a physician (Moutier et al, 2021). Many nurses who have died by suicide during this pandemic have done so not just due to fear of life threatening infection but also due to the traumatization of potential exposure when being sent into care for patients without the proper protective equipment. In one case, a nurse was in a patient's room providing care when the mask he had been reusing due to the shortage of masks snapped and fell off his face. He felt splashes of "things" from the patient on his face (Rahman & Plummer, 2020). He died by suicide the next day. Because of incidents similar to this one, many providers end up regretting their choice to go into medicine and are less likely to recommend careers in the healthcare field to their children (Moutier et al, 2021).

It is estimated that the COVID-19 pandemic could cause a 3.3% to 8.4% increase in suicides in the general population of the United States alone (Wasserman et al, 2020). Young et al states that out of all the healthcare respondents in their research, 5% indicated thoughts of suicide. This number is higher than the national estimate of 4% of U.S. adults experiencing suicidal thoughts annually. The respondents who indicated they had thoughts of being better off dead or hurting themselves in the PHQ-9 survey were six times more likely to attempt suicide

and five times more likely to die by suicide within 1 year than those who did not report having these thoughts (Young et al, 2021). This elevation in suicidal ideation is not isolated to just the COVID-19 pandemic, though. The SARS epidemic is considered a mental health disaster, and it is only one example of many other epidemics that have had the same result. Similarly, evidence shows many of the motives for suicide during the SARS epidemic were associated with stress, mental illness, and fear of being a burden to family or putting them in danger (Devitt, 2020).

Severity of depression, presence of substance use disorders, and anxiety are all predictors of suicide attempts (Wasserman et al, 2020). While mental illness is widely accepted as the strongest link to suicide, creating that association often causes us to overlook the strong impact that social forces have in cases of suicide (Devitt, 2020). While social distancing implemented during the COVID-19 pandemic has been largely instrumental in preventing the rapid spread of the virus, it ultimately deprived healthcare workers of one largely accepted defense against negative mental health effects. That of social support. Because of this deprivation, healthcare workers are seen to be at an increased risk for burn-out, psychological distress, emotional exhaustion, anxiety, and depressive symptoms (Giorgi et al, 2020). As discussed earlier, experiencing negative mental health puts the workers at an increased risk for suicidal ideation which in turn puts them at an increased risk of following through with suicide attempts.

Expenses of Increased Incidence of Moral Injury

Healthcare workers are required to adapt to changes in the field almost daily, and the impacts of this spread beyond just negatively affecting their mental health. The decrease in mental well-being that we have seen following the COVID-19 pandemic could lead to behavioral responses from healthcare workers that lead to consequences in their job performance (Giorgi et al, 2020). This could manifest as poor patient outcomes and a decrease in job satisfaction which

leads to a higher rate of turnover due to burn-out causing negative impacts on job performance, quality of care, and job satisfaction (Hines et al, 2020).

Hospitals have been cutting back on staffing since before the COVID-19 pandemic began. This caused skeletal staffing prior to the surges in patient numbers we are now seeing as the virus spreads. Because of the severity of worker cuts made before the pandemic, healthcare workers are now facing life threatening situations with extremely unsafe patient nurse ratios and a lack of PPE (Dean et al, 2020). The consequences of the minimal funding hospital administrators put towards safe staffing ratios and protective equipment prior to the pandemic should stand to serve as evidence that returning to the policies hospitals previously had is a completely irresponsible and unsustainable action (Dean et al, 2020). Hospital administrators must also recognize that by trying to lower costs by reducing staffing they ultimately have increased their employee turnover rate which is an even more expensive problem they will now have to solve. It is imperative that administrators acknowledge the difficult position that bare bones staffing protocols put their employees in, and hospitals must work to protect their employees from the mental and emotional harm that comes from overworking. As Dean et al stated “We have put our lives on the line to take care of patients. We need our organizations to have our backs now.” (2020, p. 386)

Conclusion

The impacts of pandemics and epidemics are extremely widespread, and I expect to see the effects of the COVID-19 pandemic to continue to grow for years to come. Throughout my search I found there were two common themes in articles discussing my topic. Finances and mental health. It was interesting to see how hospital administrations had been making decisions years before this pandemic that had been negatively impacting healthcare workers mental health.

Cutting costs by cutting staffing numbers will likely end up being more expensive for these hospitals because of the higher turnover rate and increased cost associated with training and onboarding new employees. Healthcare workers who end up leaving their job due to the mental impacts it had on them face increased cost associated with seeking psychiatric help because their hospitals either will not pay for it or did not work to prevent the distress from happening. This struggle that healthcare workers have faced for years has gone unnoticed and unaddressed for too long and at too high a cost.

Ultimately, the COVID-19 pandemic has brought the mental health of physicians, nurses, and other healthcare workers to the forefront of discussion. Now is the time to implement long lasting change to end the stigmatization of healthcare workers with mental illness seeking help. There are many different factors that go into an individual's decision to follow through with suicide, but suicide is preventable when the proper interventions are applied in a timely manner. We must prioritize protecting the mental health and well-being of the individuals who care for our loved ones every hour of every day because they are both the front of the line and the end of the line. If we do not protect them, then we will continue to see increasing death rates by suicide among healthcare workers. Once the healthcare workers are gone, there will be no one left to fill this critical gap, personnel who put their wellbeing and lives on the line to care for our sick loved ones. I hope that with the increase in awareness surrounding the topic of healthcare worker suicide during the past couple of years that we will see a global effort to address the struggles of healthcare workers around the world and that administrations will work to enact change to protect their employees.

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